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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,353	12/08/2003	Yu-Chieh Lin	17389.168	1352
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WORKMAN NYDEGGER 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			EXAMINER CHEN, CHIA WEI A	
			ART UNIT 2622	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,353	<b>Applicant(s)</b> LIN, YU-CHIEH	
	<b>Examiner</b> CHIA-WEI A. CHEN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9 and 14-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9 and 14-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 5/28/2008 have been fully considered but they are not persuasive.

Applicant argues with respect to claims 1, 14, and 23 that Sarbadhikari in view of Watkins does not teach that the audiovisual signal is dependent on hardware characteristics of the audiovisual capturing device, and that the audiovisual processing program is not configured to process the audiovisual signal to compensate for the hardware characteristics of the audiovisual capturing device.

However, reading the claim in the broadest sense, Sarbadhikari in view of Watkins teaches wherein an image is captured by a camera having an image sensor 12 and lens (Fig. 2, col. 5, line 55-col. 6, line 10). Since the image signal of captured by the apparatus of Sarbadhikari is inherently limited by the hardware of the CCD, lenses, and other components, the visual signal is dependent on the hardware characteristics of the capture device. (To give a few examples: the resolution of the image signal is limited by the hardware characteristics of the CCD and the sharpness and field-of-view of the image are determined by the lens characteristics.) The processing performed by Sarbadhikari in view of Watkins is thus affected by and must account for the hardware characteristics of the capture device. Thus the rejection of claims 1, 14, and 23 are sustained.

Applicant also argues with respect to claim 6 that Sarbadhikari in view of Watkins does not disclose transferring the enhancement files from the non-removable memory of a camera to a computer or removable memory.

However, reading the claim in the broadest sense, Sarbadhikari discloses the transmitting of the image processing program as well as the image signal to a host computer (col. 11, lines 5-9). Sarbadhikari discloses wherein the camera creates a script file associated with an image that instructs the computer to perform a selected processing (col. 11, lines 22-26, 5-9). The image and script is formed in the non-removable image buffer (18) of Sarbadhikari, and then written to the removable memory card (24) (col. 7, lines 7-11). The contents of the removable memory card can then be transferred to a host computer (4) via a connection cable (col. 11, lines 22-26). Therefore the rejection of claim 6 is sustained.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 3, 4, 6-9, 14-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbahikari et al. (US 5,477,264) in view of Watkins (US 6,859,609).

Claim 1, Sarbadhikari teaches, in Fig. 11, a method comprising:

- providing an visual signal capturing device (CCD 1a) configured to receive an external input and to create an video signal, the visual signal dependent on hardware characteristics of the visual signal capturing device (the visual signal is inherently dependent on the hardware characteristics of the capturing device) wherein the video capturing device includes a non-removable memory (35, 18);
- storing an video processing program (24b) in the non-removable memory (35) of the video capturing device, wherein the video processing program is configured to be transferred to a host computer and is further configured to be executed on the host computer, and wherein the audiovisual processing program is configured to process the audiovisual signal to compensate for the hardware characteristics of the audiovisual capturing device (the processing program inherently processes the hardware-dependent visual signal with regards to the hardware characteristics of the capture device) (col. 11, lines 14-26, col. 8, lines 5-17).
- transmitting the visual processing program and the visual signal to a host computer (script is transmitted along with the visual signal col. 11, lines 5-9); and
- processing the audiovisual data according to the audiovisual processing program on the host computer to generate optimized audiovisual data (computer is directed to perform the proper operation; col. 11, lines 5-9).

Sarbadhikari does not teach an audio signal.

Watkins teaches a recorder for recording audio and video signals (col. 4, lines 26-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the audio signal recording of Watkins with the method of Sarbadhikari in order to supplement a video signal, enabling an additional sensory dimension to the reproduction of a recorded scene.

Claim 3, Sarbadhikari in view of Watkins teaches the method of claim 1, wherein the audiovisual signal includes an image signal (image data 24a; col. 11, lines 19-20 of Sarbadhikari).

Claim 4, Sarbadhikari in view of Watkins teaches the method of claim 1, wherein transmitting the audiovisual processing program and the audiovisual signal to the host computer comprises copying the audiovisual processing program to a memory of the host computer via a connection (cable 38 of Sarbadhikari) between the audiovisual capturing device and the host computer (Fig. 11; col. 11, lines 5-9 and 14-26 of Sarbadhikari).

Claim 6, Sarbadhikari in view of Watkins teaches the method of claim 1, wherein transmitting the audiovisual processing program and the audiovisual signal to the host computer comprises:

- copying the audiovisual processing program from the non-removable memory (image buffer 18 of Sarbadhikari) to a removable memory (memory card 24 of Sarbadhikari); and
- transferring the audiovisual processing program from the audiovisual capturing device to the host computer via the removable memory, wherein the audiovisual

processing program is configured to cause the host computer to execute the audiovisual processing program in response to the host computer receiving the audiovisual processing program (The script to direct the computer to process the image accordingly is associated with the image file; col. 11, lines 5-9 of Sarbadhikari).

Claim 7, Watkins teaches wherein the audiovisual device is comprises a digital camera (Fig. 2, col. 4, lines 54-56 of Watkins).

Claim 8, Watkins teaches wherein the audiovisual device is comprises a digital recorder (col. 4, lines 26-27 of Watkins).

Claim 9, Sarbadhikari in view of Watkins discloses substantially the claimed invention as set forth in the discussion for claim 9. Watkins does not disclose expressly wherein the audiovisual device is a digital pen.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the audiovisual device to be a digital pen. Applicant has not disclosed that configuring the audiovisual device to be a digital pen provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the digital camera or camcorder taught by Watkins or the claimed digital pen because all devices perform the same function of recording a

audiovisual signal. Therefore, it would have been obvious to modify Watkins to obtain the invention as specified in claim 9.

Claim 14, Sarbadhikari in view of Watkins teaches a method comprising:

- providing an video capturing device (CCD 1a) configured to receive an external input and to create an audiovisual signal that is dependent on hardware characteristics of the audiovisual capturing device (the visual signal is inherently dependent on the hardware characteristics of the capturing device), wherein the audiovisual capturing device includes a non-removable memory (35, 18); and
- storing an video processing program (24b) in the non-removable memory (35) of the audiovisual capturing device, wherein the video processing program is configured to be transferred to a host computer and is further configured to be executed on the host computer (col. 11, lines 14-26, col. 8, lines 5-17 of ), and wherein the video processing program is configured to process the visual signal to compensate for the hardware characteristics of the video capturing device (the processing program inherently processes the hardware-dependent visual signal with regards to the hardware characteristics of the capture device).

Watkins teaches a recorder for recording audio and video signals (col. 4, lines 26-36).

Claim 15, Sarbadhikari in view of Watkins teaches the method of claim 14, wherein the audiovisual capturing device is configured to transfer the audiovisual signal to the host computer, and wherein the audiovisual processing program is configured to process the audiovisual signal to improve the quality of the audiovisual signal if the audiovisual



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processing program is executed on the host computer (col. 8, lines 41-44 of Sarbadhikari).

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Claim 16, Sarbadhikari in view of Watkins teaches the method of claim 14, wherein the audiovisual signal includes an image signal (image data 24a; col. 11, lines 19-20 of Sarbadhikari).

Claim 17, Sarbadhikari in view of Watkins teaches the method of claim 14, further comprising copying the audiovisual processing program to a memory of the host computer via a connection (cable 38 of Sarbadhikari) between the audiovisual capturing device and the host computer (Fig. 11, col. 11, lines 14-26 or Sarbadhikari).

Claim 18, Sarbadhikari in view of Watkins teaches the method of claim 14, wherein the audiovisual processing program is capable of optimizing the audiovisual signals stored in the non-removable memory (The embodiment taught in col. 11, lines 14-26 of Sarbadhikari is able to perform the functions taught in col. 7, lines 51-67 of Sarbadhikari).

Claim 19, Sarbadhikari in view of Watkins teaches the method of claim 14, further comprising:

- copying the audiovisual processing program from the non-removable memory (image buffer 18 of Sarbadhikari) to a removable memory (memory card 24 of Sarbadhikari); and
- transferring the audiovisual processing program from the audiovisual capturing device to the host computer via the removable memory, wherein the audiovisual

processing program is configured to cause the host computer to execute the audiovisual processing program in response to the host computer receiving the audiovisual processing program (The script to direct the computer to process the image accordingly is associated with the image file; col. 11, lines 5-9 of Sarbadhikari).

Claim 20, Watkins teaches wherein the audiovisual device is comprises a digital camera (Fig. 2, col. 4, lines 54-56 of Watkins).

Claim 21, Watkins teaches wherein the audiovisual device is comprises a digital recorder (col. 4, lines 26-27 of Watkins).

Claim 22, Sarbadhikari in view of Watkins discloses substantially the claimed invention as set forth in the discussion for claim 22. Watkins does not disclose expressly wherein the audiovisual device is a digital pen.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to configure the audiovisual device to be a digital pen. Applicant has not disclosed that configuring the audiovisual device to be a digital pen provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the digital camera or camcorder taught by Watkins or the claimed digital pen because all devices perform the same function of recording a

audiovisual signal. Therefore, it would have been obvious to modify Watkins to obtain the invention as specified in claim 22.

Claims 23-31 are analyzed as an apparatus performing the method of claims 14-22.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIA-WEI A. CHEN whose telephone number is (571)270-1707. The examiner can normally be reached on Monday - Friday, 7:30 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Chia-Wei A Chen/  
Examiner, Art Unit 2622  
07/21/2008

***/Ngoc-Yen T. VU/  
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